

Abstract of the Disclosure

A coated optical fiber capable of transmitting high-power light, which is an optical fiber having an outer surface coated with a coating material, is characterized in that the coating material is made of a transparent UV curable resin so as to prevent the coating material from absorbing light leaked outside from the optical fiber to generate heat. Further, a light transmitting method is characterized in that a fiber fuse propagation threshold which is a minimal light output required for fiber fuse propagation is obtained and a transmitted light output is controlled so that the transmitted light output becomes smaller than the fiber fuse propagation threshold.